Each Step of the Way

Every stage of a contractor’s corporate evolution carries new challenges to survival.

By R. Frank Carmichael

Historically, construction management has placed its primary emphasis and the bulk of its effort on field production, the sticks & bricks part of this service industry. The men and women responsible for physical production receive management’s praise or punishment because their efforts are visible, measurable, and the final input to the net income of the enterprise.

With this direct net income effect, and because field production is the final controllable step in the process, it is natural for management to deduce that its efforts must be concentrated on field production. What has evolved because of this assumption is the too-often-used, and totally inaccurate statement, “you only make money in the field.”

This field concentration of effort and mindset is the driving force behind a “tunnel vision” management style that evolved decades ago. The style’s continuation as the most popular school of construction management is easily discerned if we look at: the contract bidding process itself, average net incomes in the construction industry, and the background and management training of the typical president of a construction company.

In theory, the contract bidding process is a unique, yet simple concept: the firm that submits an estimate to do the job for the lowest price wins. The procedure requires construction firms to compile estimates of costs to be incurred in order to complete, as defined, a scope of work. To this is added a factor for overhead and profit, producing an estimate that is submitted.

Each bid is compared with other bids to determine the “winner.” This winner-take-all type of bidding—the sealed bid, or filed bid—is the most difficult, dangerous, and popular type of estimating.

The difficulty begins with a set of prints and specifications that may or may not be totally accurate. Moreover, the difficulty escalates in direct relationship to the degree of unknown job-site conditions that will effect field production. Many of these unknowns can only be included in the bidding process if the contractor can conduct on-site inspections prior to submittal of the bid. Too often, the time constraints on producing the bid do not allow for in-depth field inspections, and comparisons of the prints and specifications to field conditions.

The danger in sealed bid work is that the company itself must live or die with numbers that are only as good as the source documentation and site evaluations. Failure to accurately compile all costs, and to correctly evaluate job conditions and list the scope of work, may well win the contract but ruin the business.

For these reasons, the estimator sits at the bid opening with a hundred questions in his head, all bad. “Did I forget anything? Did I carry enough for...?” To succeed as an estimator requires an individual who thrives on stress and failure, because there are no second place laurels in the construction industry; the project is won or lost.

Based on market conditions, competition, and bid accuracy, contractors will at best win one in five, one in ten, or worse. While many contractors aggressively seek negotiated contracts, cost-plus work, or time-and-material jobs, the majority of work is still awarded through the sealed bid process.

A unit takeoff is the first step, and the core of the estimate. This portion of the estimating process is a systematic task-and the result is the total dimension of work to be done. Armed with quantities, prices are extended for the “fixed cost” portion of the final bid (such as materials, subcontractors, and rental equipment). The final step, and the most important component in the compilation of costs, is the estimate (or guesstimate) of labor costs.

The price difference for these defined fixed costs will vary slightly from one contractor to another. If bidding on a drywall job, the price paid for sheetrock will differ by one...
or two cents per sheet—not enough to clearly give an advantage to one contractor over another. The test is the accuracy of estimated production quantity, and its resultant labor cost.

The question asked during the bidding process that is the essence of bidding is: Based on the conditions on this project, what labor production quantity is needed to both win the project, but also earn the profit needed to sustain the organization?

An estimate that is compiled with production quantities that are too aggressive will result in the failure of field crews to accomplish the mandated production quantities, and the job will lose money. On the other hand, an estimate that is too conservative in projected labor production will result in a bid price that eliminates the contractor from the project.

This condensed version of the estimating process is also a simplistic look at what is usually a detailed analysis of project documentation and conditions. Each company will have its own unique variations, but the key element to the success of the process is the accuracy of the labor portion of the estimated costs.

The higher the degree of accuracy of the bid, the greater the prospect of earning the projected profits. But a project that is not bid properly will not make money, regardless of how hard a contractor works in the field.

Bidding in and of itself is a difficult and time-consuming process, where success hinges on the labor projection. Common sense then suggests labor, as the primary variable, should dominate the time spent in the analysis and preparation of the bid.

But in the working world, the final number submitted as the bid price will usually contain a solid projection of fixed costs—but all too often, contain only a “desired” labor cost estimate.

Management looks at the project and feels its crews will be able to meet or exceed a desired production quota. This “gut-feel” approach to labor estimating creates boom-or-bust gross profit margins. Moreover, this method of bidding produces roller-coaster production quantities, that leaves field management constantly at war with the estimating group. Fingers are pointed back and forth as both groups, estimators and field management, blame the other for the failure of the field crews to meet bid quotas.

**Doing It Profitably**

Your price is lowest, you comply with all other bidding qualifications; the project is yours. Successful completion of the first step in the project, the bid, plunges you immediately into the reality of getting
the job done profitably.

Success is transferred from estimating to field operations and the field must now do the job at or below estimated costs. Though straightforward enough, the very concept places the stress to perform immediately on the field production crews.

Before the project is even begun, management is looking for ways to cut projected field labor costs to increase the profit margin on a project. Or subcontractors are expected to “sharpen their pencils” and reduce their price. Or material suppliers are expected to cut a little because of the quantity ordered or the prospect of future work. The push is on! It’s time to “lean” a little. “This is a good job, and we can make money on this one if only we push...”

How much money will the contractor make? There are more than 1.7 million construction firms in the United States, and the average company will earn a pretax net income of 3.1 percent, if it survives at all.

Survival for the construction company operating with such minimal profit margins is far from an even bet. The construction industry suffers a staggering failure rate. Between the years 1982 and 1984, for every 12.5 operations started, 10.4 did not survive this two-year period.

At the end of every boom cycle, usually the newer companies are the first to go under, the ones started during the good years. They have no depth to their balance sheets, and no customer base to sustain them during the lean years. They’ve never known a time when there just wasn’t any work; a time when thirty-five companies line up to bid a small renovation job. They don’t know how to cut back and hustle to eke out a living.

But if they get through the lean years, the experience teaches lessons that stay with the company—from the president’s office, down to the part-time college kid working the summer.

These contractors learn that survival, and the prospect of a failure for the organization, depends on the backlog of work on hand. There are no tomorrows, but only what you can sell today, to extend earnings as far into the failure as possible.

The backlog has to be built up. A month of work, two, then six—and with each extension, there is a comfort level achieved. With each month’s extension, the contractor knows the company will survive at least that long.

Downturns in the market also produce a few surprises, as one or two of the “established” companies go under. They got greedy spread themselves too thin, and it all collapsed. Or perhaps they strangled on the carrying costs. The litany goes on, but the result is the same. The owners have pumped every thing they own into it, and they’re going down hard.

The ones who make it are truly survival professionals. Successfully operating a company in an industry that gleams 2-5 percent pretax net income is at best harrowing. The owner of a struggling small construction company can expect his share of ulcers, insomnia, angina, and a tendency to display bulging facial veins and high-pitched screams at least once a week. His style is hands-on, direct involvement in every aspect of his business, and the final decision is always his.

At this first stage of corporate evolution, the small startup will grow and prosper as a result of this direct involvement approach. Direct involvement with virtually every aspect of the physical project, and the constant push of the owner/project manager will ensure the profitable completion.

That magic phrase, “on time and within budget,” must become the bench mark of a new company. Such success is primarily the result of the owner’s on-site presence. He personally correct his estimating er-
rors. If he missed an item in the bid, he does the work himself to keep costs to a minimum. He is there every day to ensure maximum production from his crew. He makes money, job after job.

As a direct result of his improving reputation and project performance, there occurs an expansion of the customer base and an increasing average project size. The company grows as a result of the success, and the owner/project manager is forced to move further and further from field management. Instead he becomes more a business manager.

Success and growth produce the need to expand what is perceived as a necessary evil, the “non-revenue-producing overhead”—secretaries, accountants, estimators, clerks. The checkbook is no longer carried on the front seat of a pickup truck. Jobs are no longer bid from the kitchen table. The expansion of personnel means an office, garage, mechanics, truck drivers.

The Young President

The president/owner; if he survives this second stage of rapid expansion, learns the only real limit to the organization’s size is his business management capacity. Or put another way, the company will operate at a level roughly equal to the management capabilities of the president of the company. What defines that capacity is the background and management training the contractor received, coupled with intuitive skills.

Management training began with the owner/president’s first day in the field. He did or did not graduate from high school; maybe he went to college. For reasons that were compelling at the time, he entered the trades.

As a tradesman, he learned the technical side of his business during a formal apprenticeship or informal company training program. He was managed by his peers, other men who had started in the field as he was now doing. The management of our future president consisted of only two concerns: quantity and quality. I’ve listed them in their order of perceived importance and also the order in which management dedicated their efforts. The constant push to do it faster is without question the priority of this hard ball style of construction management. What he saw was a constant emphasis centered around the completion of the project in the minimal amount of time with the minimal amount of costs incurred. Do it faster, cheaper and better than your competition and you will be successful. To achieve this clearly understandable goal he is taught to lean on the men, and the tougher the job the more you lean. That is how it works, how it has always worked and will continue to work because the adage; you only make money in the field, has to be true…?

The quality side of management’s effort are forced on him. He learns that quality trained employees do better and ultimately more cost efficient work than poorly trained employees. Furthermore, he learns that the construction industry is huge, but all work is local and locally it is a small club. He strives to become known as a quality oriented producer, someone who gets the job done. His reputation which has been built in the field always precedes him and it is his only irreplaceable sales tool. Success was then defined and constantly reinf

forced years before he decides to start his own company, as a balance to be achieved on that fine line between minimal acceptable quality and maximum quantity.

Our young president spends five, ten or fifteen years in this management environment, one that may be rather harsh in practice, but a method that does work. The vindication of his “Job-Hammer” management style is that his advancement record and salary increases have all been based on his field performance. Carrying this over to his own business it is this management style that produces the early financial successes. He is making money because he is running his jobs that same way he did as an employee, a successful employee; he gets the work done. What our president fails to learn and in many cases fights to avoid is the realization that with growth his role must change. He is no longer a project manager, he is the president of a company. He refuses to learn that the management tools he used to be a successful employee, to successfully build his own business, breaks down totally and completely with growth.

To run a successful construction company requires much more than a strong technical knowledge of a trade. You cannot build and operate a business on a one legged stool. The construction process starts with marketing/sales/estimating. A person
or persons charged with the responsibility of presenting your company to the marketplace, selling your services and abilities, and building a backlog of work that conforms to your business plan. Limiting your estimator to a compilation of fixed costs while you insert what you think your field crews can achieve will lock you onto a profit/loss roller coaster that you will never get off. You will live or die based on the business cycles that you cannot control.

From the table the bid becomes a job which must be performed in the field. Yes you make money in the field, but you should make the money you planned to make in the bidding process. Because it is in the field that you verify past performance which are the standards, or benchmarks used in the bidding process today. Finally, and in parallel with field production is the ongoing financial analysis and feedback of the project. It is through this analysis that you are able to fine tune the bidding process and verify field production performance. If you are mandating that your accounting staff simply tabulate costs and prepare reports of what has happened, what cannot be changed, you are vastly underutilizing their capabilities.

You don’t make money just in the field. As president of the company you make money, which is the benchmark of success today, by managing an integrated group of diversified people who achieve the plans and goals you establish for the enterprise. You must be able to step outside the organization and develop a business plan. The communication of those plans and goals to all employees must be clear and concise. Most importantly, the goals established by you for each group within the organization must be attainable. You must then manage the performance of all of the activities to guide, revise and modify.

You cannot manage the field and assume that the sales/estimating staff are correctly building an accurate, profitable backlog. You cannot devote all of your creative efforts to the projects at the cost of a directionless administrative and financial staff. Your knowledge of financial and job cost reports cannot be limited to: What’s the bottom line on this job? Hard earned growth and success have moved you into a new job that you have not been trained for; president of a company. Intuitive skills or “gut feel” will, for many, be the only management tool they will ever use. After devoting five or ten years in hands on education to master their trade they believe they learn to run a company via on-the-job training.

Limiting and concentrating your management activities to field production proves the fact that you only make money in the field. Moreover, it will further prove that you will never know how much your going to make for the job, or the year until after the job or year has ended. If you make money the field crews did a great job and get the bonuses and praise. If you don’t make money the field let you down, didn’t learn hard enough to get the production you needed because they don’t understand. . . “you only make money in the field.” Managing a company from inside a one lane tunnel places you and your company right in the middle of so many other production oriented companies that live by a truer adage: The only difference between construction companies is the color of their pick-up trucks.

REFERENCES
2. ibid
3. ibid

Growth brings the necessary evil of ‘non-revenue-producing overhead.’